

# VAPORIZATION IN THE WINTER TIME

## Expert Tells of Ways to Overcome Balky Motor on Cold Mornings.

On these frosty mornings when the motor seems cranky the new car owner is inclined to say unkind things about the manufacturer and the engine. It isn't the fault of the engine at all, according to H. C. Brock, principal of the automobile school of the West Side Y. M. C. A., 218 West Fifty-seventh street. He says it is because "the gasoline doesn't burn." However, there is a solution of the problem, at least enough of a remedy to make life a little happier for the owner. Here is what he says about this.

"When the car is started in a warm garage the gasoline will probably vaporize and the engine run in good shape, but as soon as the car goes out into the cold air it will cool the engine so that some of the gasoline will be condensed. Therefore we close the radiator cover partly or wholly until the engine is thoroughly warmed. If the car is started in a cold garage, the test-bottle and disengaging method must be resorted to. Wrap the cloth around the radiator so that it does not cover the air intake and pour the boiling water on the rag, taking care that none gets in the air intake. The hot water will raise the temperature of the mixture so that the engine will run. In some cases it may be necessary even to drain the cooling system and fill it with hot water, so that the combustion chamber is heated up.

"It is true that gasoline now sold has a greater heat-producing quality if only we can get it properly mixed and volatilized. It may be that the gasoline producers, by putting heavier gasoline on the market, have been of real service to auto men once they have learned to use the new gas economically and efficiently. They may have had in mind the higher power, but they have given us a gas which is very hard to vaporize on cold mornings. Some time ago probably the carburetor men will catch up and give us a vaporizer which will do the trick. Until they do we will have to look for means to overcome the difficulties now experienced, and it is largely a question of warming up the engine.

"In changing gasoline from liquid to vapor considerable heat must be supplied. When the atmospheric temperature is too low there is not sufficient heat to vaporize the gasoline sprayed into the carburetor. When the engine is warm the process of vaporization goes on from the needle valve to the carburetor. If the engine is cold the process is retarded more or less, and under some conditions it is possible for thoroughly vaporized gasoline to be again condensed. The man who does not understand is inclined to say unkind things about the engine and talk about 'dreadful gasoline.' The trouble is that the temperature is so low that we must heat the air before we can get it into the carburetor. Practically all the carburetor manufacturers put out a device to heat the air supply.

"As the weather becomes colder it will be found necessary not to close up the radiator more and more in order to keep the engine at the required temperature. High engine temperature up to the point where the water in the cooling system begins to boil is desirable from the standpoint of efficiency, and if no trouble is experienced with irregular running the hotter the engine is the larger amount of power developed.

"One manufacturer (Hudson) has incorporated in the radiator a shutter-like device by means of which the amount of air admitted may be regulated from the driver's seat. Doubtless others will follow or find an equally good substitute.

"Radiator covers to fit almost any car now made may be procured at trifling expense; one may simply put a piece of cardboard over it. I was out without a cover recently and the engine did not work right. So I stopped when I came to a new shop and bought a paper and tied it over the radiator. I got home all right with the device.

"One of our men complained the other day that his car would start fine and run all right as long as he was going away from home, but as soon as he turned homeward it would begin to act up. He wanted to know if I thought the car had the windstuck. Inquiry developed the fact that the trips he spoke of on the going trip were with the wind and returning were against it. The added force of the wind over the engine cooled the engine too much and he was advised to cover the radiator under such circumstances. He has reported no trouble since.

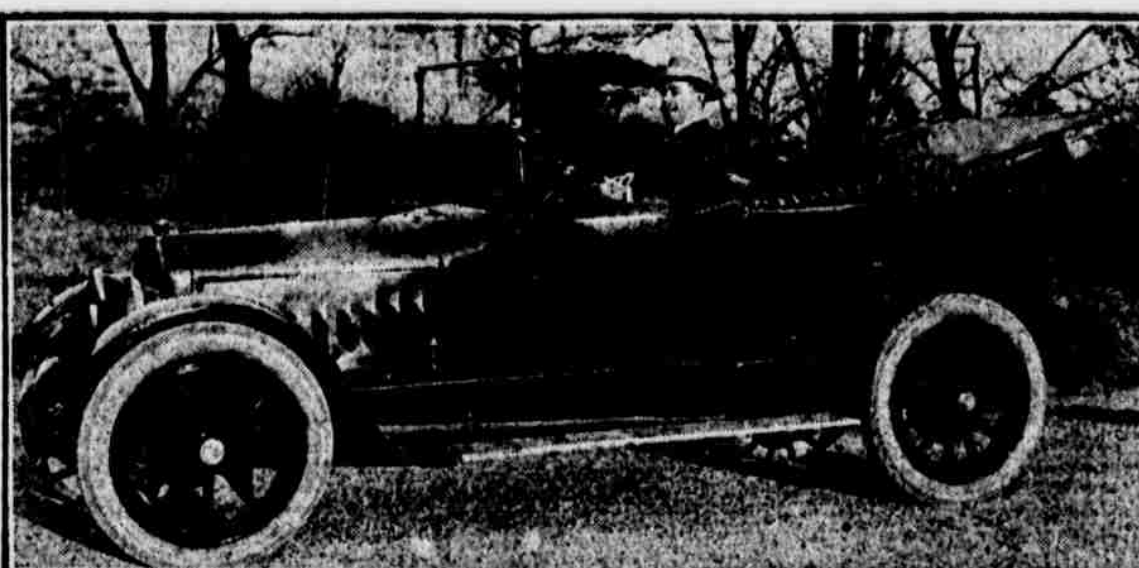
"Of course sometimes the skipping may be overcome by enriching the mixture by the dash control, but with the present heavy gasoline the enriched mixture does not seem to do much good and it is simply adding to the supply of gasoline which already is refusing to vaporize. Therefore it seems to be a waste of the effect of the dash for the cold engine for heat reason.

"Herbie-Booth Shows Speed.

"The Scripps-Booth car is possessed of real speed as was proved a few days ago on the Sheepshead Bay speedway, when a sleek four-cylinder car, partially stripped, covered the distance round the track at the rate of 55 miles per hour.

"The car was driven by William R. M. Very, sales manager of the Lewis-Franchini Motor Company and was witnessed by a number of motor enthusiasts.

# Old Peerless Representatives Sell New Peerless Car.



Here is the Peerless eight cylinder, seven passenger touring car, now being handled in the metropolitan district by the Van Cortlandt Vehicle Corporation at 1800 Broadway, corner of Sixty-third street. Sales Manager J. A. Clark is at the wheel. Walter Woods, well known in the trade, is vice-president of the new company.

Two men long associated with the product of the Peerless Motor Car Company of Cleveland are executive in the Van Cortlandt Vehicle Corporation, the new organization that is handling Peerless motor cars and motor trucks in this city and adjacent territory.

Walter Woods, who is vice-president of the new company, was associated with the Peerless factory branch when it was operated in New York city and later worked as a sales executive attached to the Cleveland office.

During the recent purchasing of motor trucks by the United States Government, Mr. Woods spent considerable time in the Mexican border for the Peerless company as a motor truck expert. He is an old motor car man, having been associated with the industry since its very beginning. Like many other pioneer motor car men, he was formerly in the bicycle business.

Mr. Woods' intimate knowledge of New York conditions as they have to do with motor cars will enable him not only to distribute the popular product of the Peerless Motor Car Company to good advantage, but to put into effect service methods that will meet with wide approval.



WALTER WOODS.

J. A. Clark is sales manager for the Van Cortlandt Vehicle Corporation. Mr. Clark managed the sale of Peerless motor cars here for many years, and is widely known in motor car circles.

The Van Cortlandt Vehicle Corporation sales and service stations are now open at Sixty-third street and Broadway and Sixty-fourth street and Broadway respectively. A special exhibit of Peerless cars is being arranged by the new distributors for the week of the National Automobile Show.

The Peerless Motor Car Company is now executing plans at its Cleveland factories for rebuilding its output of the model 56 eight cylinder car. The great power and great tire and gasoline economy that are characteristics of this car have given it a distinctive place in the market.

The Van Cortlandt Vehicle Corporation has placed orders that will assure prompt delivery of Peerless cars in the various body styles in large quantities.

## A. A. A. OPENS UPTOWN OFFICE.

New Headquarters for General Touring Information.

To meet the steadily growing demand for accurate and authentic touring information, the American Automobile Association is establishing a branch bureau in the uptown automobile district. The accessibility of the new quarters, the Circle Building, on Broadway near Fifty-ninth street, will appeal to many who do not always find time to visit the general A. A. A. headquarters at 427 Fifth avenue, where hundreds of members and other visitors are served weekly by Manager Hammett and his competent staff of assistants.

It is confidently expected that the ability to purchase all maps and to obtain useful touring assistance at such a convenient point as the new branch will appeal to the many. Manager T. E. Shoenberger, who took charge of the branch on December 1, more than comfortably busy.

There will be on hand maps and full



OWEN MAGNETIC SALES JUMP.

In Splendid Setting, Car Makes Strong Appeal.

Interest in the Owen Magnetic car is increasing daily, not only in this city, but throughout the country.

With the opening of the spacious, well-furnished salesroom of the R. M. Owen Company, at Broadway and Fifty-seventh street, a real rush of business

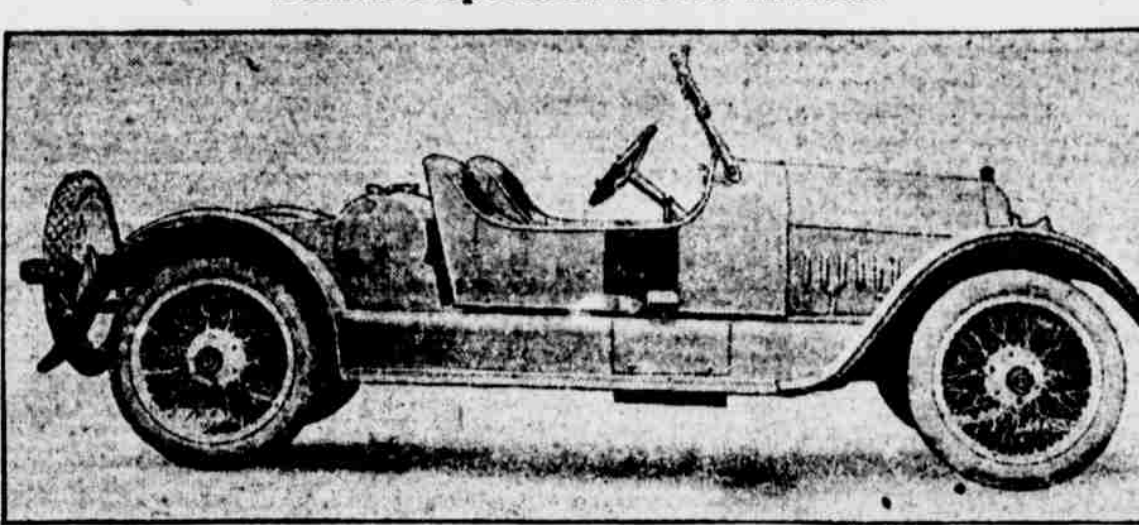
## PACKARD PROMOTIONS.

Men Go Up the Line for Faithful Service.

Alvan Macaulay, president of the Packard Motor Car Company, has announced a series of important changes in the administrative and selling organization. The part which three department heads in particular have played in the recent remarkable development of the Packard company is recognized with a promotion for each of them.

H. H. Hill, sales manager, is made assistant general manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability.

# Daniels 8 Speedster Is New Arrival.



This Daniels "Eight" Speedster is one of the new arrivals on Automobile Row. It is a very attractive, speedy looking car, beautifully finished and mounted on a regular Daniels chassis and geared up to do seventy-five miles an hour. The car is now on exhibition in the salesroom of the A. Elliott Ransney Company, metropolitan distributors, at 244 West Fifty-ninth street.

information for both the city man and the visitor from out of town, to whom a cordial invitation is extended to the use of the bureau as suits his convenience.

The metropolitan consulate division of the A. A. A. has been quietly but persistently working year after year, and many things have been accomplished through its successful efforts. It is expected that the uptown branch bureau will be the means of quickly and considerably increasing the present consulate membership, which now numbers well up in the thousands, and counts among its staunch supporters some of the best known and most substantial citizens of the Empire City.

has been enjoyed there. It is difficult to keep cars on hand long enough to display them, as they have been going at the rate of two a day since the opening.

Retail Sales Manager Fred Titus says that the business is limited only by the ability of the company to deliver the cars. "The car with a thousand speeds" certainly is becoming known by thousands of motorists, who are beginning to understand what it means to drive without fears and who appreciate the very finest kind of coach work," says Mr. Titus.

The work of acquiring the proper setting for these fine cars in Eastern territory fell on the shoulders of E. S. Partridge, the Eastern sales manager, and he has made a splendid job of it. The enlargement of the local salesroom and the new decorative and lighting features installed there have brought out all the elegance of this car by giving it appealing surroundings.

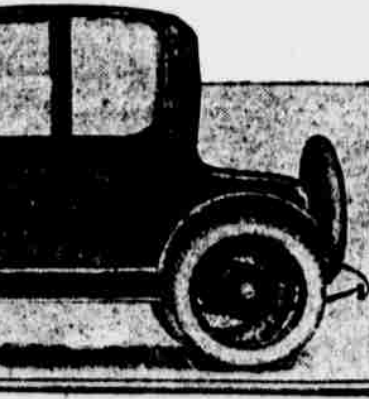
Throughout the East all the Owen Magnetic forces have begun a splendid "drive" to put the car where it belongs. Julian Halford, manager of the Owen Magnetic Car Company of Philadelphia, reports a tremendous demand for the car in that city since it was introduced in a suitable setting. He says the cars are literally rolled off the floor so that enthusiastic owners may get immediate use of them.

Carl Broszel, who for ten years was secretary of the Simplex Company, has taken the northern part of New Jersey as his sales territory for the Owen Magnetic, and has opened a beautiful salesroom at 12 William street, Newark. This endorsement of the car by a practical automobile man of long experience is particularly gratifying to the Owen organization.

nine years—a period in which the company has maintained a position of growing importance in the motor world.

A. J. Picard, metropolitan distributor for the Owen Magnetic, has purchased the interest of E. S. Morrison in A. J. Picard & Co. Mr. Picard has incorporated his business and will continue under the old name of A. J. Picard & Co. The new company is being started for the company at a West Sixty-third street, which will be ready for occupancy on or about March 1, 1917.

## This Velie Coupe Seats Four.



The Velie Company is one of the few big companies able to postpone a price advance until January 1 and thereby give prospective buyers "a next year's car for this year's price." The company is rather proud of the fact that its business forecast enables it to quote present prices on all cars delivered after January 1. Cars delivered after that date will cost \$50 more apiece.

Commenting on the situation, George Garland, distributor for the Velie in this territory, said:

"We have a few cars to deliver at \$1,035, and it would be well for prospective buyers to see them within the next few days, because they are being snapped up rapidly.

"The coupe shown in the illustration above sells for \$1,095. Having the development of the all-weather type of body there has been an insistent demand for a four passenger car, light in construction, capable of being freely opened or snugly closed, as the occasion requires, but beyond all, attractive, roomy and comfortable.

"In the makeup of the Velie coupe, the

model 28 chassis is used. The body has the individuality, design and appointments of the most costly enclosed car. It features graceful curves and panels, drop windows of a heavy plate ashless variety, delightful dark blue whipcord trimmings, a ventilating shield and rain protector, all contribute in part to the attractiveness of the car.

The seating arrangement provides ample room for four passengers. The driver's position is slightly ahead of the two passengers adjacent to him. Unhindered driving freedom is secured in this way, while the passengers enjoy greater comfort. A fourth seat with deep tufted back and cushion is mounted on a stationary pedestal and may be revolved into any desired position.

Velie sales have increased beyond expectation the past year. The progressive assembly system has been installed and every facility of over a mile of factory is being applied in an endeavor to keep production at a pace that will keep the necessary advance down to such a modest figure.

UNUSUAL SALE OF SAXONS.

Saxon sales have shown a big increase since George S. Morrow assumed control of the local interests of the company. Morrow is a Western hustler who is ever ready with something new to interest motor prospects.

Having just opened new salesrooms and general offices on Broadway near Fifty-sixth street, Morrow has turned his old establishment on Fifty-seventh street just west of Broadway into headquarters for used cars and special bargains in Saxons. The place is in charge of J. P. Crowley, who has had long experience in this line of work.

As an "upener" Crowley is offering new six cylinder five passenger touring cars and four cylinder two passenger runabouts at reduced prices. It gives prospective buyers an opportunity to get unusual bargains backed by the factory guarantee.

# HOW TO KEEP DOWN YOUR TIRE BILL

## Mileage Can Be Doubled by Proper Attention to Pressure and Small Abrasions.

If time, expense and trouble are to be at all considered there is no more important question relative to the running of a motor car than the care of the tire casing, and it may be said right at the start that as a general thing there is no part of the machine which receives as little proportionate attention, says *Motor Age*. It has been estimated that the expense of upkeep of the machine is divided into three equal parts, namely, fuel, including gasoline and oil, tires and general wear and tear of all the other parts of the machine put together. By this it is meant that the tire is one-third of the total expense, and if they are properly cared for they may be termed, is responsible for one-third of the actual expenses of running the car. It must be remembered that tires cost one-third the total expense, and if they are properly cared for they may be termed, is responsible for one-third of the actual expenses of running the car.

Another source of trouble is running on rough roads or ruts, as well as running the tires against the edges of curbs. The result of this carelessness is the wearing of the rubber from the wall of the tire, thereby exposing the fabric. This little example, however, how long a person were to walk down the street, taking each step so close to the curb as to allow the upper of the shoe to drag the sole against the curb, would it be before the upper would be worn through, yet the sole unaffected? Taking the corner too fast so that the car would slide straight ahead on the common and costly error of the average motorist. Skidding around one corner may do the tire more harm than running for miles straight ahead on the improved roads. There is really no call for rounding the corner on the jump, and the fellow who does it generally pays for his sport in lost mileage. The same is true about looking the brakes and skidding the rear wheel. There have been times when the machine has been carrying a good load and the driver has been skidding the rear wheel, and the result is a whole section of the tread being torn from the tire. The first thing a motorist thinks of in case of this kind is that the tread of the tire is defective, and back to the seller goes the tire, provided it has not gone the required distance. Little do many of these fellows who take tires back on account of defective tread realize that at a glance the tire men can tell the real cause of nine-tenths of the trouble. It is not the tread, but the use of a straight sided tire on a slicker rim. There being no lip on the bead of a straight sided tire, it naturally follows that there is only one narrow line of contact between the edge of the rim and the bead. This results in a ridge being gouged into the side of the bead, this often causing the bead to loosen and become entirely worthless. Then, too, the slicker tire is sometimes placed upon the straight sided rim. This often results in the bead becoming flattened and tearing loose from the remainder of the tire.

Of the many ways in which the casing is subjected to abuse, none is so common as overloading and under inflation, the results of which are identical. These mistakes are made by many of the tire men, and they are responsible for a wavy condition of the tread, showing that the "adhesive friction" between the layers of the fabric has become overstrained. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

Sometimes the tire may be broken before the blowout occurs. The blowout may occur while the car is standing in the garage or on the street. Sometimes a few of the plies of fabric were broken, the opening sufficiently to pinch the inner tube, allowing the tire to deflate gradually. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

# HENRY JOY TURNS TO AERONAUTICS

## Federal Government May Select His Field as Regular Flying Station.

The aeronautical field which Henry H. Joy, chairman of the board of directors of the Packard Motor Car Company, has developed near Detroit within the last two years, entirely at his own expense, occupied much of the attention of a committee of the National Advisory Committee for Aeronautics on its recent visit to Detroit in the course of a tour of the important manufacturing centres of the country.

The army and navy representatives, Government officials and engineering scientists who made the inspection, congratulated Mr. Joy warmly on his provision in selecting the site. They characterized it as one of the best fields in the United States for aeronautical purposes. Their expressions generally were such as to encourage the belief that the Joy field will be designated as one of the aeronautical stations of the United States Government.

The field is twenty-seven miles north-east of Detroit, a level expanse of 570 acres on the shore of Lake St. Clair. It offers a splendid course for trials over both land and water.

The committee members were impressed with Detroit as a particularly appropriate location for a Government aviation field, by reason of the unexampled facilities which it has for manufacturing internal combustion engines, and also because Detroit has an exceptional amount of engineering and mechanical talent available for piloting and maintaining air machines.

The Detroit meeting of the committee brought out that the use of aircraft will soon be a practical reality in the many services of the Government and also in many private industrial fields. It was predicted that just as it is possible to design a ship for a certain load capacity, speed and maneuvering power, it will be possible to design an airplane with reference to load, speed and maneuvering power.

The Federal Government has developed since 1910 a small body of highly skilled aviators. They have been trained not only for fighting, but in general navigation of the air. With the appropriations now available, the increase in the number of trained aviators will be rapid, and the small body of officers referred to will be drawn on for teachers.

# BUICKS ARE "WELL LIT UP"

## Ten Lights Glitter on the Town Car.

The Buick Motor Company is showing a town car containing unusual lighting and signaling devices. Installed inside the body is a dicrograph, and when the driver wants to speak to the driver all he does is press a button on the window sill. This sounds a small horn near the driver's ear. Then pressing another button the owner begins to talk in a natural tone of voice, and although entirely enclosed, he is heard distinctly by the man in the front seat. It does away with all talking through a tube. With the dicrograph attachment the driver can get his instructions distinctly above all traffic noises.

There are ten lights in and on this car. In addition to the regulation headlights are two flush pillar lamps on the front of the body, and on the front edge of the roof what is known as an "opera light." The latter is a striking little addition that will appeal to many. Then inside the car are a shell glass dome light and two ornamental bracket lamps of unusual beauty. When this "Buick" is "all lit up" it is a regular motor confagration.

# PACKARD PROMOTIONS.

Men Go Up the Line for Faithful Service.

Alvan Macaulay, president of the Packard Motor Car Company, has announced a series of important changes in the administrative and selling organization. The part which three department heads in particular have played in the recent remarkable development of the Packard company is recognized with a promotion for each of them.

H. H. Hill, sales manager, is made assistant general manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability.

# HOW TO KEEP DOWN YOUR TIRE BILL

If time, expense and trouble are to be at all considered there is no more important question relative to the running of a motor car than the care of the tire casing, and it may be said right at the start that as a general thing there is no part of the machine which receives as little proportionate attention, says *Motor Age*. It has been estimated that the expense of upkeep of the machine is divided into three equal parts, namely, fuel, including gasoline and oil, tires and general wear and tear of all the other parts of the machine put together. By this it is meant that the tire is one-third of the total expense, and if they are properly cared for they may be termed, is responsible for one-third of the actual expenses of running the car.

Another source of trouble is running on rough roads or ruts, as well as running the tires against the edges of curbs. The result of this carelessness is the wearing of the rubber from the wall of the tire, thereby exposing the fabric. This little example, however, how long a person were to walk down the street, taking each step so close to the curb as to allow the upper of the shoe to drag the sole against the curb, would it be before the upper would be worn through, yet the sole unaffected? Taking the corner too fast so that the car would slide straight ahead on the common and costly error of the average motorist. Skidding around one corner may do the tire more harm than running for miles straight ahead on the improved roads. There is really no call for rounding the corner on the jump, and the fellow who does it generally pays for his sport in lost mileage. The same is true about looking the brakes and skidding the rear wheel. There have been times when the machine has been carrying a good load and the driver has been skidding the rear wheel, and the result is a whole section of the tread being torn from the tire. The first thing a motorist thinks of in case of this kind is that the tread of the tire is defective, and back to the seller goes the tire, provided it has not gone the required distance. Little do many of these fellows who take tires back on account of defective tread realize that at a glance the tire men can tell the real cause of nine-tenths of the trouble. It is not the tread, but the use of a straight sided tire on a slicker rim. There being no lip on the bead of a straight sided tire, it naturally follows that there is only one narrow line of contact between the edge of the rim and the bead. This results in a ridge being gouged into the side of the bead, this often causing the bead to loosen and become entirely worthless. Then, too, the slicker tire is sometimes placed upon the straight sided rim. This often results in the bead becoming flattened and tearing loose from the remainder of the tire.

Of the many ways in which the casing is subjected to abuse, none is so common as overloading and under inflation, the results of which are identical. These mistakes are made by many of the tire men, and they are responsible for a wavy condition of the tread, showing that the "adhesive friction" between the layers of the fabric has become overstrained. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

Sometimes the tire may be broken before the blowout occurs. The blowout may occur while the car is standing in the garage or on the street. Sometimes a few of the plies of fabric were broken, the opening sufficiently to pinch the inner tube, allowing the tire to deflate gradually. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

# BUICKS ARE "WELL LIT UP"

The Buick Motor Company is showing a town car containing unusual lighting and signaling devices. Installed inside the body is a dicrograph, and when the driver wants to speak to the driver all he does is press a button on the window sill. This sounds a small horn near the driver's ear. Then pressing another button the owner begins to talk in a natural tone of voice, and although entirely enclosed, he is heard distinctly by the man in the front seat. It does away with all talking through a tube. With the dicrograph attachment the driver can get his instructions distinctly above all traffic noises.

There are ten lights in and on this car. In addition to the regulation headlights are two flush pillar lamps on the front of the body, and on the front edge of the roof what is known as an "opera light." The latter is a striking little addition that will appeal to many. Then inside the car are a shell glass dome light and two ornamental bracket lamps of unusual beauty. When this "Buick" is "all lit up" it is a regular motor confagration.

# PACKARD PROMOTIONS.

Men Go Up the Line for Faithful Service.

Alvan Macaulay, president of the Packard Motor Car Company, has announced a series of important changes in the administrative and selling organization. The part which three department heads in particular have played in the recent remarkable development of the Packard company is recognized with a promotion for each of them.

H. H. Hill, sales manager, is made assistant general manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability.

# HOW TO KEEP DOWN YOUR TIRE BILL

If time, expense and trouble are to be at all considered there is no more important question relative to the running of a motor car than the care of the tire casing, and it may be said right at the start that as a general thing there is no part of the machine which receives as little proportionate attention, says *Motor Age*. It has been estimated that the expense of upkeep of the machine is divided into three equal parts, namely, fuel, including gasoline and oil, tires and general wear and tear of all the other parts of the machine put together. By this it is meant that the tire is one-third of the total expense, and if they are properly cared for they may be termed, is responsible for one-third of the actual expenses of running the car.

Another source of trouble is running on rough roads or ruts, as well as running the tires against the edges of curbs. The result of this carelessness is the wearing of the rubber from the wall of the tire, thereby exposing the fabric. This little example, however, how long a person were to walk down the street, taking each step so close to the curb as to allow the upper of the shoe to drag the sole against the curb, would it be before the upper would be worn through, yet the sole unaffected? Taking the corner too fast so that the car would slide straight ahead on the common and costly error of the average motorist. Skidding around one corner may do the tire more harm than running for miles straight ahead on the improved roads. There is really no call for rounding the corner on the jump, and the fellow who does it generally pays for his sport in lost mileage. The same is true about looking the brakes and skidding the rear wheel. There have been times when the machine has been carrying a good load and the driver has been skidding the rear wheel, and the result is a whole section of the tread being torn from the tire. The first thing a motorist thinks of in case of this kind is that the tread of the tire is defective, and back to the seller goes the tire, provided it has not gone the required distance. Little do many of these fellows who take tires back on account of defective tread realize that at a glance the tire men can tell the real cause of nine-tenths of the trouble. It is not the tread, but the use of a straight sided tire on a slicker rim. There being no lip on the bead of a straight sided tire, it naturally follows that there is only one narrow line of contact between the edge of the rim and the bead. This results in a ridge being gouged into the side of the bead, this often causing the bead to loosen and become entirely worthless. Then, too, the slicker tire is sometimes placed upon the straight sided rim. This often results in the bead becoming flattened and tearing loose from the remainder of the tire.

Of the many ways in which the casing is subjected to abuse, none is so common as overloading and under inflation, the results of which are identical. These mistakes are made by many of the tire men, and they are responsible for a wavy condition of the tread, showing that the "adhesive friction" between the layers of the fabric has become overstrained. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

Sometimes the tire may be broken before the blowout occurs. The blowout may occur while the car is standing in the garage or on the street. Sometimes a few of the plies of fabric were broken, the opening sufficiently to pinch the inner tube, allowing the tire to deflate gradually. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

# BUICKS ARE "WELL LIT UP"

The Buick Motor Company is showing a town car containing unusual lighting and signaling devices. Installed inside the body is a dicrograph, and when the driver wants to speak to the driver all he does is press a button on the window sill. This sounds a small horn near the driver's ear. Then pressing another button the owner begins to talk in a natural tone of voice, and although entirely enclosed, he is heard distinctly by the man in the front seat. It does away with all talking through a tube. With the dicrograph attachment the driver can get his instructions distinctly above all traffic noises.

There are ten lights in and on this car. In addition to the regulation headlights are two flush pillar lamps on the front of the body, and on the front edge of the roof what is known as an "opera light." The latter is a striking little addition that will appeal to many. Then inside the car are a shell glass dome light and two ornamental bracket lamps of unusual beauty. When this "Buick" is "all lit up" it is a regular motor confagration.

# PACKARD PROMOTIONS.

Men Go Up the Line for Faithful Service.

Alvan Macaulay, president of the Packard Motor Car Company, has announced a series of important changes in the administrative and selling organization. The part which three department heads in particular have played in the recent remarkable development of the Packard company is recognized with a promotion for each of them.

H. H. Hill, sales manager, is made assistant general manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability.

# HOW TO KEEP DOWN YOUR TIRE BILL

If time, expense and trouble are to be at all considered there is no more important question relative to the running of a motor car than the care of the tire casing, and it may be said right at the start that as a general thing there is no part of the machine which receives as little proportionate attention, says *Motor Age*. It has been estimated that the expense of upkeep of the machine is divided into three equal parts, namely, fuel, including gasoline and oil, tires and general wear and tear of all the other parts of the machine put together. By this it is meant that the tire is one-third of the total expense, and if they are properly cared for they may be termed, is responsible for one-third of the actual expenses of running the car.

Another source of trouble is running on rough roads or ruts, as well as running the tires against the edges of curbs. The result of this carelessness is the wearing of the rubber from the wall of the tire, thereby exposing the fabric. This little example, however, how long a person were to walk down the street, taking each step so close to the curb as to allow the upper of the shoe to drag the sole against the curb, would it be before the upper would be worn through, yet the sole unaffected? Taking the corner too fast so that the car would slide straight ahead on the common and costly error of the average motorist. Skidding around one corner may do the tire more harm than running for miles straight ahead on the improved roads. There is really no call for rounding the corner on the jump, and the fellow who does it generally pays for his sport in lost mileage. The same is true about looking the brakes and skidding the rear wheel. There have been times when the machine has been carrying a good load and the driver has been skidding the rear wheel, and the result is a whole section of the tread being torn from the tire. The first thing a motorist thinks of in case of this kind is that the tread of the tire is defective, and back to the seller goes the tire, provided it has not gone the required distance. Little do many of these fellows who take tires back on account of defective tread realize that at a glance the tire men can tell the real cause of nine-tenths of the trouble. It is not the tread, but the use of a straight sided tire on a slicker rim. There being no lip on the bead of a straight sided tire, it naturally follows that there is only one narrow line of contact between the edge of the rim and the bead. This results in a ridge being gouged into the side of the bead, this often causing the bead to loosen and become entirely worthless. Then, too, the slicker tire is sometimes placed upon the straight sided rim. This often results in the bead becoming flattened and tearing loose from the remainder of the tire.

Of the many ways in which the casing is subjected to abuse, none is so common as overloading and under inflation, the results of which are identical. These mistakes are made by many of the tire men, and they are responsible for a wavy condition of the tread, showing that the "adhesive friction" between the layers of the fabric has become overstrained. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

Sometimes the tire may be broken before the blowout occurs. The blowout may occur while the car is standing in the garage or on the street. Sometimes a few of the plies of fabric were broken, the opening sufficiently to pinch the inner tube, allowing the tire to deflate gradually. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

# BUICKS ARE "WELL LIT UP"

The Buick Motor Company is showing a town car containing unusual lighting and signaling devices. Installed inside the body is a dicrograph, and when the driver wants to speak to the driver all he does is press a button on the window sill. This sounds a small horn near the driver's ear. Then pressing another button the owner begins to talk in a natural tone of voice, and although entirely enclosed, he is heard distinctly by the man in the front seat. It does away with all talking through a tube. With the dicrograph attachment the driver can get his instructions distinctly above all traffic noises.

There are ten lights in and on this car. In addition to the regulation headlights are two flush pillar lamps on the front of the body, and on the front edge of the roof what is known as an "opera light." The latter is a striking little addition that will appeal to many. Then inside the car are a shell glass dome light and two ornamental bracket lamps of unusual beauty. When this "Buick" is "all lit up" it is a regular motor confagration.

# PACKARD PROMOTIONS.

Men Go Up the Line for Faithful Service.

Alvan Macaulay, president of the Packard Motor Car Company, has announced a series of important changes in the administrative and selling organization. The part which three department heads in particular have played in the recent remarkable development of the Packard company is recognized with a promotion for each of them.

H. H. Hill, sales manager, is made assistant general manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability. C. R. Norton, manager of the truck sales department, is promoted to general sales manager, and thus gets broader scope for his proved executive ability.

# HOW TO KEEP DOWN YOUR TIRE BILL

If time, expense and trouble are to be at all considered there is no more important question relative to the running of a motor car than the care of the tire casing, and it may be said right at the start that as a general thing there is no part of the machine which receives as little proportionate attention, says *Motor Age*. It has been estimated that the expense of upkeep of the machine is divided into three equal parts, namely, fuel, including gasoline and oil, tires and general wear and tear of all the other parts of the machine put together. By this it is meant that the tire is one-third of the total expense, and if they are properly cared for they may be termed, is responsible for one-third of the actual expenses of running the car.

Another source of trouble is running on rough roads or ruts, as well as running the tires against the edges of curbs. The result of this carelessness is the wearing of the rubber from the wall of the tire, thereby exposing the fabric. This little example, however, how long a person were to walk down the street, taking each step so close to the curb as to allow the upper of the shoe to drag the sole against the curb, would it be before the upper would be worn through, yet the sole unaffected? Taking the corner too fast so that the car would slide straight ahead on the common and costly error of the average motorist. Skidding around one corner may do the tire more harm than running for miles straight ahead on the improved roads. There is really no call for rounding the corner on the jump, and the fellow who does it generally pays for his sport in lost mileage. The same is true about looking the brakes and skidding the rear wheel. There have been times when the machine has been carrying a good load and the driver has been skidding the rear wheel, and the result is a whole section of the tread being torn from the tire. The first thing a motorist thinks of in case of this kind is that the tread of the tire is defective, and back to the seller goes the tire, provided it has not gone the required distance. Little do many of these fellows who take tires back on account of defective tread realize that at a glance the tire men can tell the real cause of nine-tenths of the trouble. It is not the tread, but the use of a straight sided tire on a slicker rim. There being no lip on the bead of a straight sided tire, it naturally follows that there is only one narrow line of contact between the edge of the rim and the bead. This results in a ridge being gouged into the side of the bead, this often causing the bead to loosen and become entirely worthless. Then, too, the slicker tire is sometimes placed upon the straight sided rim. This often results in the bead becoming flattened and tearing loose from the remainder of the tire.

Of the many ways in which the casing is subjected to abuse, none is so common as overloading and under inflation, the results of which are identical. These mistakes are made by many of the tire men, and they are responsible for a wavy condition of the tread, showing that the "adhesive friction" between the layers of the fabric has become overstrained. Another cause of trouble is the use of a tire which has been cut along the side walls or along the rim. A rim cut tire is an easy victim to blowouts. Unquestionably there are many tires in use which are in a state of ruin, and the cause of this is not the tire itself, but the way it is used. A tire which is run soft is indented by a curb or stone until the tread bumps against the bead, and the result is a hole in the tire which is bound to suffer. Keep the tire pumped to the pressure recommended by the manufacturer.

Sometimes the tire may be broken before the blowout occurs. The blowout may occur while